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1600

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/341,590A

DATE: 07/11/2003

TIME: 16:04:04

Input Set : A:\55508-revised sequence listing 1 July 03.txt  
 Output Set: N:\CRF4\07112003\I341590A.raw

3 <110> APPLICANT: LARSEN, BJORNE DUE  
 5 <120> TITLE OF INVENTION: PHARMACOLOGICALLY ACTIVE PEPTIDE CONJUGATES HAVING A  
 6 REDUCED TENDENCY TOWARDS ENZYMATIC HYDROLYSIS  
 8 <130> FILE REFERENCE: 55508(45487)  
 10 <140> CURRENT APPLICATION NUMBER: 09/341,590A  
 11 <141> CURRENT FILING DATE: 1999-07-12  
 13 <150> PRIOR APPLICATION NUMBER: DK 0317/98  
 14 <151> PRIOR FILING DATE: 1998-03-09  
 16 <160> NUMBER OF SEQ ID NOS: 122  
 18 <170> SOFTWARE: PatentIn Ver. 2.1  
 20 <210> SEQ ID NO: 1  
 21 <211> LENGTH: 5  
 22 <212> TYPE: PRT  
 23 <213> ORGANISM: Artificial Sequence  
 25 <220> FEATURE:  
 26 <223> OTHER INFORMATION: Description of Artificial Sequence: DPLCE  
 28 <220> FEATURE:  
 29 <221> NAME/KEY: MOD\_RES  
 30 <222> LOCATION: (2)  
 31 <223> OTHER INFORMATION: D-Pen  
 33 <400> SEQUENCE: 1  
 W--> 34 Tyr Xaa Gly Phe Cys  
 35 1 5  
 38 <210> SEQ ID NO: 2  
 39 <211> LENGTH: 8  
 40 <212> TYPE: PRT  
 41 <213> ORGANISM: Artificial Sequence  
 43 <220> FEATURE:  
 44 <223> OTHER INFORMATION: Description of Artificial Sequence: DPLCE-Arg-Pro-Ala  
 46 <220> FEATURE:  
 47 <221> NAME/KEY: MOD\_RES  
 48 <222> LOCATION: (2)  
 49 <223> OTHER INFORMATION: D-Pen  
 51 <400> SEQUENCE: 2  
 W--> 52 Tyr Xaa Gly Phe Cys Arg Pro Ala  
 53 1 5  
 56 <210> SEQ ID NO: 3  
 57 <211> LENGTH: 6  
 58 <212> TYPE: PRT  
 59 <213> ORGANISM: Artificial Sequence  
 61 <220> FEATURE:  
 62 <223> OTHER INFORMATION: Description of Artificial Sequence: DPDPE-Phe  
 64 <220> FEATURE:

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65 &lt;221&gt; NAME/KEY: MOD\_RES

66 &lt;222&gt; LOCATION: (2)

67 &lt;223&gt; OTHER INFORMATION: D-Pen

69 &lt;220&gt; FEATURE:

70 &lt;221&gt; NAME/KEY: MOD\_RES

71 &lt;222&gt; LOCATION: (5)

72 &lt;223&gt; OTHER INFORMATION: D-Pen

74 &lt;400&gt; SEQUENCE: 3

W--&gt; 75 Tyr Xaa Gly Phe Xaa Phe

76 1 5

79 &lt;210&gt; SEQ ID NO: 4

80 &lt;211&gt; LENGTH: 6

81 &lt;212&gt; TYPE: PRT

82 &lt;213&gt; ORGANISM: Artificial Sequence

84 &lt;220&gt; FEATURE:

85 &lt;223&gt; OTHER INFORMATION: Description of Artificial Sequence: DPLCE-Phe

87 &lt;220&gt; FEATURE:

88 &lt;221&gt; NAME/KEY: MOD\_RES

89 &lt;222&gt; LOCATION: (2)

90 &lt;223&gt; OTHER INFORMATION: D-Pen

92 &lt;400&gt; SEQUENCE: 4

W--&gt; 93 Tyr Xaa Gly Phe Cys Phe

94 1 5

97 &lt;210&gt; SEQ ID NO: 5

98 &lt;211&gt; LENGTH: 7

99 &lt;212&gt; TYPE: PRT

100 &lt;213&gt; ORGANISM: Artificial Sequence

102 &lt;220&gt; FEATURE:

103 &lt;223&gt; OTHER INFORMATION: Description of Artificial Sequence: DPDPE-Arg-Gly

105 &lt;220&gt; FEATURE:

106 &lt;221&gt; NAME/KEY: MOD\_RES

107 &lt;222&gt; LOCATION: (2)

108 &lt;223&gt; OTHER INFORMATION: D-Pen

110 &lt;220&gt; FEATURE:

111 &lt;221&gt; NAME/KEY: MOD\_RES

112 &lt;222&gt; LOCATION: (5)

113 &lt;223&gt; OTHER INFORMATION: D-Pen

115 &lt;400&gt; SEQUENCE: 5

W--&gt; 116 Tyr Xaa Gly Phe Xaa Arg Gly

117 1 5

120 &lt;210&gt; SEQ ID NO: 6

121 &lt;211&gt; LENGTH: 7

122 &lt;212&gt; TYPE: PRT

123 &lt;213&gt; ORGANISM: Artificial Sequence

125 &lt;220&gt; FEATURE:

126 &lt;223&gt; OTHER INFORMATION: Description of Artificial Sequence: DPLCE-Arg-Gly

128 &lt;220&gt; FEATURE:

129 &lt;221&gt; NAME/KEY: MOD\_RES

130 &lt;222&gt; LOCATION: (2)

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131 <223> OTHER INFORMATION: D-Pen  
133 <400> SEQUENCE: 6  
W--> 134 Tyr Xaa Gly Phe Cys Arg Gly  
135 1 5  
138 <210> SEQ ID NO: 7  
139 <211> LENGTH: 7  
140 <212> TYPE: PRT  
141 <213> ORGANISM: Artificial Sequence  
143 <220> FEATURE:  
144 <223> OTHER INFORMATION: Description of Artificial Sequence: DPDPE-Phe-Ala  
146 <220> FEATURE:  
147 <221> NAME/KEY: MOD\_RES  
148 <222> LOCATION: (2)  
149 <223> OTHER INFORMATION: D-Pen  
151 <220> FEATURE:  
152 <221> NAME/KEY: MOD\_RES  
153 <222> LOCATION: (5)  
154 <223> OTHER INFORMATION: D-Pen  
156 <400> SEQUENCE: 7  
W--> 157 Tyr Xaa Gly Phe Xaa Phe Ala  
158 1 5  
161 <210> SEQ ID NO: 8  
162 <211> LENGTH: 15  
163 <212> TYPE: PRT  
164 <213> ORGANISM: Artificial Sequence  
166 <220> FEATURE:  
167 <223> OTHER INFORMATION: Description of Artificial Sequence: DSIP-(Lys-Glu)3  
169 <400> SEQUENCE: 8  
170 Trp Ala Gly Gly Asp Ala Ser Gly Glu Lys Glu Lys Glu Lys Glu  
171 1 5 10 15  
174 <210> SEQ ID NO: 9  
175 <211> LENGTH: 15  
176 <212> TYPE: PRT  
177 <213> ORGANISM: Artificial Sequence  
179 <220> FEATURE:  
180 <223> OTHER INFORMATION: Description of Artificial Sequence: DSIP-(Glu)6  
182 <400> SEQUENCE: 9  
183 Trp Ala Gly Gly Asp Ala Ser Gly Glu Glu Glu Glu Glu Glu  
184 1 5 10 15  
187 <210> SEQ ID NO: 10  
188 <211> LENGTH: 11  
189 <212> TYPE: PRT  
190 <213> ORGANISM: Artificial Sequence  
192 <220> FEATURE:  
193 <223> OTHER INFORMATION: Description of Artificial Sequence: Leu-enkephalin-(Glu)6  
195 <400> SEQUENCE: 10  
196 Tyr Gly Gly Phe Leu Glu Glu Glu Glu Glu  
197 1 5 10  
200 <210> SEQ ID NO: 11

## RAW SEQUENCE LISTING

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Input Set : A:\55508-revised sequence listing 1 July 03.txt  
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201 <211> LENGTH: 11  
202 <212> TYPE: PRT  
203 <213> ORGANISM: Artificial Sequence  
205 <220> FEATURE:  
206 <223> OTHER INFORMATION: Description of Artificial Sequence: Leu-enkephalin-(Lys)6  
208 <400> SEQUENCE: 11  
209 Tyr Gly Gly Phe Leu Lys Lys Lys Lys Lys Lys  
210 1 5 10  
213 <210> SEQ ID NO: 12  
214 <211> LENGTH: 5  
215 <212> TYPE: PRT  
216 <213> ORGANISM: Homo sapiens  
218 <400> SEQUENCE: 12  
219 Tyr Gly Gly Phe Leu  
220 1 5  
223 <210> SEQ ID NO: 13  
224 <211> LENGTH: 9  
225 <212> TYPE: PRT  
226 <213> ORGANISM: Homo sapiens  
228 <400> SEQUENCE: 13  
229 Cys Tyr Ile Gln Asn Cys Pro Leu Gly  
230 1 5  
233 <210> SEQ ID NO: 14  
234 <211> LENGTH: 14  
235 <212> TYPE: PRT  
236 <213> ORGANISM: Artificial Sequence  
238 <220> FEATURE:  
239 <223> OTHER INFORMATION: Description of Artificial Sequence: AF 12505  
241 <400> SEQUENCE: 14  
242 Ile Glu Gly Pro Thr Leu Arg Gln Trp Leu Ala Ala Arg Ala  
243 1 5 10  
246 <210> SEQ ID NO: 15  
247 <211> LENGTH: 14  
248 <212> TYPE: PRT  
249 <213> ORGANISM: Homo sapiens  
251 <220> FEATURE:  
252 <223> OTHER INFORMATION: insulin-like growth factor I (57-70)  
254 <400> SEQUENCE: 15  
255 Ala Leu Leu Glu Thr Tyr Cys Ala Thr Pro Ala Lys Ser Glu  
256 1 5 10  
259 <210> SEQ ID NO: 16  
260 <211> LENGTH: 12  
261 <212> TYPE: PRT  
262 <213> ORGANISM: Homo sapiens  
264 <220> FEATURE:  
265 <223> OTHER INFORMATION: insulin-like growth factor I (30-41)  
267 <400> SEQUENCE: 16  
268 Gly Tyr Gly Ser Ser Ser Arg Arg Ala Pro Gln Thr  
269 1 5 10

## RAW SEQUENCE LISTING

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Input Set : A:\55508-revised sequence listing 1 July 03.txt  
Output Set: N:\CRF4\07112003\I341590A.raw

272 <210> SEQ ID NO: 17  
273 <211> LENGTH: 18  
274 <212> TYPE: PRT  
275 <213> ORGANISM: Homo sapiens  
277 <220> FEATURE:  
278 <223> OTHER INFORMATION: insulin-like growth factor I (24-41)  
280 <400> SEQUENCE: 17  
281 Tyr Phe Asn Lys Pro Thr Gly Tyr Gly Ser Ser Ser Arg Arg Ala Pro  
282 1 5 10 15  
284 Gln Thr  
287 <210> SEQ ID NO: 18  
288 <211> LENGTH: 8  
289 <212> TYPE: PRT  
290 <213> ORGANISM: Homo sapiens  
292 <220> FEATURE:  
293 <223> OTHER INFORMATION: insulin-like growth factor II (33-40)  
295 <400> SEQUENCE: 18  
296 Ser Arg Val Ser Arg Arg Ser Arg  
297 1 5  
300 <210> SEQ ID NO: 19  
301 <211> LENGTH: 9  
302 <212> TYPE: PRT  
303 <213> ORGANISM: Artificial Sequence  
305 <220> FEATURE:  
306 <223> OTHER INFORMATION: Description of Artificial Sequence: insulin-like  
307 growth [tyro] factor II (33-40)  
309 <400> SEQUENCE: 19  
310 Tyr Ser Arg Val Ser Arg Arg Ser Arg  
311 1 5  
314 <210> SEQ ID NO: 20  
315 <211> LENGTH: 16  
316 <212> TYPE: PRT  
317 <213> ORGANISM: Homo sapiens  
319 <220> FEATURE:  
320 <223> OTHER INFORMATION: insulin-like growth factor II (69-84)  
322 <400> SEQUENCE: 20  
323 Asp Val Ser Thr Pro Pro Thr Val Leu Pro Asp Asn Phe Pro Arg Tyr  
324 1 5 10 15  
327 <210> SEQ ID NO: 21  
328 <211> LENGTH: 6  
329 <212> TYPE: PRT  
330 <213> ORGANISM: Artificial Sequence  
332 <220> FEATURE:  
333 <223> OTHER INFORMATION: Description of Artificial Sequence: GHRP-6  
335 <220> FEATURE:  
336 <221> NAME/KEY: MOD\_RES  
337 <222> LOCATION: (2)  
338 <223> OTHER INFORMATION: D-Trp  
340 <220> FEATURE:

Input Set : A:\55508-revised sequence listing 1 July 03.txt  
Output Set: N:\CRF4\07112003\I341590A.raw

**Please Note:**

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:1; Xaa Pos. 2  
Seq#:2; Xaa Pos. 2  
Seq#:3; Xaa Pos. 2,5  
Seq#:4; Xaa Pos. 2  
Seq#:5; Xaa Pos. 2,5  
Seq#:6; Xaa Pos. 2  
Seq#:7; Xaa Pos. 2,5  
Seq#:21; Xaa Pos. 2,5  
Seq#:27; Xaa Pos. 1,12  
Seq#:28; Xaa Pos. 1  
Seq#:29; Xaa Pos. 1  
Seq#:31; Xaa Pos. 4  
Seq#:32; Xaa Pos. 1,4  
Seq#:34; Xaa Pos. 8  
Seq#:35; Xaa Pos. 1,4,8  
Seq#:42; Xaa Pos. 3  
Seq#:45; Xaa Pos. 1  
Seq#:47; Xaa Pos. 1  
Seq#:48; Xaa Pos. 1  
Seq#:51; Xaa Pos. 1,3,5,7  
Seq#:57; Xaa Pos. 1  
Seq#:58; Xaa Pos. 2  
Seq#:59; Xaa Pos. 3  
Seq#:60; Xaa Pos. 4  
Seq#:61; Xaa Pos. 5  
Seq#:63; Xaa Pos. 1  
Seq#:64; Xaa Pos. 2  
Seq#:65; Xaa Pos. 3  
Seq#:66; Xaa Pos. 4  
Seq#:67; Xaa Pos. 5  
Seq#:68; Xaa Pos. 6  
Seq#:69; Xaa Pos. 1,2  
Seq#:70; Xaa Pos. 1,3  
Seq#:71; Xaa Pos. 1,4  
Seq#:72; Xaa Pos. 1,5  
Seq#:73; Xaa Pos. 1,6  
Seq#:74; Xaa Pos. 2,3  
Seq#:75; Xaa Pos. 2,4  
Seq#:76; Xaa Pos. 2,5  
Seq#:77; Xaa Pos. 2,6  
Seq#:78; Xaa Pos. 3,4  
Seq#:79; Xaa Pos. 3,5  
Seq#:80; Xaa Pos. 3,6  
Seq#:81; Xaa Pos. 4,5

RAW SEQUENCE LISTING ERROR SUMMARY DATE: 07/11/2003  
PATENT APPLICATION: US/09/341,590A TIME: 16:04:05

Input Set : A:\55508-revised sequence listing 1 July 03.txt  
Output Set: N:\CRF4\07112003\I341590A.raw

Seq#:82; Xaa Pos. 4,6  
Seq#:83; Xaa Pos. 5,6  
Seq#:93; Xaa Pos. 6,15  
Seq#:94; Xaa Pos. 12,21  
Seq#:95; Xaa Pos. 12,21  
Seq#:96; Xaa Pos. 1,3,4  
Seq#:100; Xaa Pos. 6,7,8,9,10,11

## VERIFICATION SUMMARY

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Input Set : A:\55508-revised sequence listing 1 July 03.txt  
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L:34 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1 after pos.:0  
L:52 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2 after pos.:0  
L:75 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:0  
L:93 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4 after pos.:0  
L:116 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:0  
L:134 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:0  
L:157 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7 after pos.:0  
L:346 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:21 after pos.:0  
L:447 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:27 after pos.:0  
L:465 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:28 after pos.:0  
L:486 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:29 after pos.:0  
L:528 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:31 after pos.:0  
L:551 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:32 after pos.:0  
L:585 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:34 after pos.:0  
L:613 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:35 after pos.:0  
L:717 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:42 after pos.:0  
L:761 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:45 after pos.:0  
L:792 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:47 after pos.:0  
L:810 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:48 after pos.:0  
L:870 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:51 after pos.:0  
L:954 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:57 after pos.:0  
L:973 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:58 after pos.:0  
L:992 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:59 after pos.:0  
L:1011 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:60 after pos.:0  
L:1030 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:61 after pos.:0  
L:1062 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:63 after pos.:0  
L:1081 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:64 after pos.:0  
L:1100 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:65 after pos.:0  
L:1119 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:66 after pos.:0  
L:1138 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:67 after pos.:0  
L:1157 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:68 after pos.:0  
L:1176 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:69 after pos.:0  
L:1201 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:70 after pos.:0  
L:1226 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:71 after pos.:0  
L:1251 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:72 after pos.:0  
L:1276 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:73 after pos.:0  
L:1295 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:74 after pos.:0  
L:1320 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:75 after pos.:0  
L:1345 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:76 after pos.:0  
L:1370 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:77 after pos.:0  
L:1389 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:78 after pos.:0  
L:1414 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:79 after pos.:0  
L:1439 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:80 after pos.:0  
L:1458 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:81 after pos.:0  
L:1483 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:82 after pos.:0  
L:1502 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:83 after pos.:0  
L:1678 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:93 after pos.:0  
L:1704 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:94 after pos.:0

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M:341 Repeated in SeqNo=94

L:1730 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:95 after pos.:0